UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

August 17, 1992

Jean A. Mescher
Project Coordinator
Manager, Environmental and Engineering Services
McKesson Corporation
One Post Street
San Francisco, CA 94104-5296

RE: Performance standard for the proposed Incinerator at the Arkwood Inc. Superfund Site, Omaha, Arkansas

Dear Ms. Mescher:

On February 14, 1992, EPA submitted comments on draft Remedial Design (RD) Work Plan for the Arkwood Site in Omaha, Arkansas. As a part of those comments, the Environmental Protection Agency (EPA) stated that "an incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of at least 99.99 percent for the non-dioxin containing material (i.e., PCP and C-PNAs) and a 99.9999 percent DRE for the dioxin containing waste" at the site.

On June 2, 1992, EPA received the revised RD work plan from McKesson and comments responding to issues raised by EPA in the earlier draft of the work plan. The specific comment raised by McKesson concerning the DRE performance standard for the proposed Arkwood incinerator is addressed below.

McKesson contends that a 99.99 percent DRE is the appropriate performance standard for the contaminants at the Arkwood site based on the following reasoning:

1) the ROD specifies 40 CFR 264, Subpart O, as the ARAR for incineration. That regulation requires 99.99 percent DRE for each principal organic hazardous constituent (POHC), and a 99.9999 percent DRE for certain listed hazardous wastes, including FO20, FO21, FO22, FO23, FO26, and FO27;

2) an EPA memorandum dated November 15, 1988 from Randall Brown to Larry Wright, specifically states the material on the site is not to be considered a 'dioxin' waste and therefore the proposed incinerator does not need to meet a 99.9999 percent DRE;

3) reference is made in the ROD to a 99.99 percent DRE (p. 70); and

4) that a 99.99 percent DRE is appropriate for all potential POHCs, since none of the materials at the site are listed hazardous wastes.

EPA has thoroughly reviewed McKesson's rationale for a 99.99 percent DRE performance standard for the proposed Arkwood incinerator. EPA, however, will require that a 99.9999 percent DRE performance standard be demonstrated on a surrogate POHC prior to incinerating any dioxin contaminated waste at the Arkwood site.

40 CFR 264, Subpart O, outlines the required performance standards for incinerators burning hazardous wastes. One of these standards requires that a 99.9999 percent DRE be achieved when burning FO20, FO21, FO22, FO23, FO26 and FO27 listed wastes. This performance standard is both relevant and appropriate for the dioxin contaminated wastes at the Arkwood site.

On December 6, 1991, EPA classified wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations, as a 40 CFR 261 Subpart D listed hazardous waste. The waste material at the Arkwood site is now considered to be an FO32 hazardous waste. FO32 wastes are listed on the basis of containing; Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, and heptachlorodibenzofurans.

The hazardous waste incinerator regulations require that all dioxin containing listed wastes (i.e., FO20, FO21, FO22, FO23, FO26 and FO27) meet a 99.9999 percent DRE. Even though the incinerator regulations have not been updated as yet to include FO32 wastes, FO32 wastes contain dioxin, and therefore the 99.9999 percent DRE performance standard is relevant and appropriate for the dioxin containing wastes at the Arkwood site.

Additionally, the dioxins present at the Arkwood site are most likely from the use of pentachlorophenol (PCP) that contained dioxin contaminants. FO21 wastes are wastes from the production or manufacturing use of pentachlorophenol, or intermediates used to produce its derivatives, and are listed in part, on the basis of containing penta- and hexachlorodibenzo-p-dioxins and penta- and hexachlorodibenzofurans. Similar contaminants were found at the Arkwood site. 40 CFR 264, Subpart O performance standards for hazardous waste incinerators, requires a 99.9999 percent DRE performance standard for these wastes; thus, the performance standard for disposing of FO21 wastes is relevant and appropriate for the dioxin contaminated wastes at the Arkwood site.

Further, EPA's reference to a 99.99 percent DRE (p. 70 of the ROD), was made in context of responding to a question received during the public comment period. The question in the responsiveness summary raised the issue of transferring site contaminants from the soil to the air during incineration. EPA's response stated that the risk from air emissions from a well designed and operated incinerator was much less than that currently at the site. Contaminants from the soil would not be transferred to the air because <u>at least 99.99%</u> of the contamination would be destroyed by the incinerator.

This statement implies that at least a 99.99 percent DRE would be required for site wastes, but does not establish the standard as a 99.99 percent DRE.

Finally, EPA's November 15, 1988, memorandum, from Randall Brown to Larry Wright, references a March 4, 1985 letter from John Skinner (Office of Solid Waste) to Walter Talarek (American Wood Preserves Institute) discussing the applicability of the dioxin rule to wood treating wastes. The letter states that "most wastes from these operations would not be considered to be 'dioxin' wastes unless such wastes met the specific listings of F021, F027 or F028". Since this memorandum was written, wastes from wood treating facilities have become F032 RCRA listed wastes, and are listed in part based on their potential for containing certain dioxin and furan compounds. As such, the incinerator performance standards for other dioxin containing wastes (F020, F021, F022, F023, F026 and F027) are relevant and appropriate for the dioxin containing wastes at the Arkwood site.

If you have any questions or comments concerning this matter, please feel free to contact us at 214 655-6582.

Sincerely,

Richard Ehrhart
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AR/LA Enforcement Section (6H-EA)

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